



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,830	12/04/2003	Clinton L. Jones	59358US002	7444
32692	7590	08/26/2005	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			BERMAN, SUSAN W	
			ART UNIT	PAPER NUMBER

1711

DATE MAILED: 08/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/727,830

Applicant(s)

JONES ET AL.

Examiner

Susan W. Berman

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 14-18 and 20-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-27 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

***Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-13 and 19, drawn to a brightness enhancing film that is the reaction product of the components set forth, classified in class 526, subclass 328.
- II. Claims 14-18, 20-23 and 25-27, drawn to articles comprising a brightness enhancing film and a second optical film or a brightness enhancing film having a microstructures surface, classified in class 359, subclass 495.
- III. Claim 24, drawn to a polymerizable composition comprising a photoinitiator, classified in class 522, subclass 64.

The inventions are distinct, each from the other because of the following reasons:

Inventions I or III and II or III and I are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product of Group I is deemed to be useful as film for providing a microstructured surface or for providing an optical article comprising a second optical film and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. In the instant case, the intermediate product of Group III is deemed to be useful as a composition for providing a coating on a substrate other than an optical article and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner

Art Unit: 1711

finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper. Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Group I, restriction for examination purposes as indicated is proper.

During a telephone conversation with Carolyn Fischer on August 15, 2005, a provisional election was made with traverse to prosecute the invention of Group I, claims 1-13 and 19. Affirmation of this election must be made by applicant in replying to this Office action. Claims 14-18 and 20-27 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### ***Information Disclosure Statement***

Applicant listed co-pending applications on the IDS form submitted January 11, 2005, in this application. The serial numbers have been lined out because the applications are not published documents. However, the related applications have been considered by the examiner.

Art Unit: 1711

*Claim Rejections - 35 USC § 102/103*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by a commercially available liquid crystal display panel comprising a brightness enhancing film as disclosed in the “Supplemental Information Disclosure Statement” submitted by Applicant on March 12, 2004. Applicant states that the brightness enhancing film is a reaction product of the same composition as Comparative Examples A and B of the instant application except that the photoinitiator consisted of 2 pph “Darocur 4265”. Darocur 4265 is a 1:1 blend of 2-hydroxy-2-methylpropiophenone (“Darocur 1173”) and diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide (Darocur TPO). The instant claims are anticipated because the claims are drawn to the reaction product, i.e. the polymer obtained by polymerizing the acrylate –functional components set forth in Table 1 in the instant application. The polymerization product, i.e. applicant’s claimed brightness enhancing film, would be expected to be the same although a different photoinitiator was employed to initiate polymerization. The photoinitiator is employed as initiator and is not a part of the polymerization product unless a polymerizable photoinitiator is employed. Thus, in the absence of evidence to the contrary, the reaction product of the acrylate-functional

Art Unit: 1711

components a-c of the composition corresponding to the instantly claimed composition and admitted to have provided the reaction product of the commercially available brightness enhancing film.

Claims 1-13 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by a commercially available liquid crystal display panel comprising a brightness enhancing film as disclosed in the "Supplemental Information Disclosure Statement" submitted by Applicant on March 12, 2004. Applicant states that the brightness enhancing film is a reaction product of the same composition as Comparative Examples A and B of the instant application except for the photoinitiator being 2.75 wt % of a photoinitiator having the same structure as "Irgacure 184". "Irgacure 184" is 1-hydroxy-cyclohexylphenyl ketone. The instant claims are anticipated because the claims are drawn to the reaction product, i.e. the polymer obtained by polymerizing the acrylate-functional components set forth in Table 1 in the instant application. The polymerization product, i.e. applicant's claimed brightness enhancing film, would be expected to be the same although a different photoinitiator was employed to initiate polymerization. The photoinitiator is employed as initiator and is not a part of the polymerization product unless a polymerizable photoinitiator is employed. Thus, in the absence of evidence to the contrary, the reaction product of the acrylate-functional components a-c of the composition corresponding to the instantly claimed composition and admitted to have provided the reaction product of the commercially available brightness enhancing film. With respect to the recitation of pph and absorbance of the photoinitiator in claims 1-4 and the recitations of acylphosphine oxide photoinitiators in claims 6 and 19, the commercially available brightness enhancing film is disclosed to have been produced using a photoinitiator not having these properties or structure; however, the instantly claimed brightness enhancing film would be expected to be the same as that instantly claimed, in the absence of evidence to the contrary. The reasons is that the film is the reaction product of the acrylate-functional monomers, not of the photoinitiator employed to initiate polymerization.

Claims 1-8, 10, 12, 13 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishio et al (5,714,218). Nishio et al disclose cured products for optical articles obtained by polymerizing compositions comprising components corresponding to applicant's (a), (b) and (c) components in instant claim 1. See column 4, lines 1-30, column 8, line 65, to column 10, line 36, column 11, line 61, to column 12, line 42, and Table 1. Applicant's component (a), i.e. 2,4,6-tribromophenoxyethyl acrylate, is taught in column 4, line 29, and column 10, lines 1-14. Nishio et al component (a) corresponds to applicant's component (b) and also to component (c). Any of the disclosed monomers or oligomers having at least two functional groups meets the requirement for component (c) to be a crosslinking agent. Nishio et al teach properties of a suitable photoinitiator corresponding to those set forth in the instant claims (column 12). Irgacure 184 and Darocur 1173 are used in the examples; however, Nishio et al clearly teach that photoinitiators such as 2,4,6-trimethylbenzoyldiphenylphosphine oxide are preferred and have the properties set forth in the instant claims.

The instant claims are anticipated because the claims are drawn to the reaction product, i.e. the polymer obtained by polymerizing the acrylate –functional components set forth in Table 1 in the instant application. The polymerization product, i.e. applicant's claimed brightness enhancing film, would be expected to be the same regardless of the photoinitiator was employed to initiate polymerization. The photoinitiator is employed as initiator and is not a part of the polymerization product unless a polymerizable photoinitiator is employed. Thus, in the absence of evidence to the contrary, the reaction product of the acrylate-functional components a-c of the composition corresponding to the instantly claimed composition and admitted to have provided the reaction product of the commercially available brightness enhancing film.

### *Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-10, 12, 13 and 19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 and 19 of copending Application No. 10/748,049 [Publication No. US 2005/014835]. Although the conflicting claims are not identical, they are not patentably distinct from each other for the following reasons. The claims of '049 recite a brightness enhancing film comprising the reaction product of the same components as set forth in the instant claims. Component (a) corresponds to applicant's (b), component (b) corresponds to applicant's (a) and component (c) and (d) correspond to applicant's components (c) and (d). It would have been obvious to one skilled in the art at the time of the invention to employ any of the specific crosslinking agents set forth in the claims of '049 as the crosslinking agent set forth in the instant claims to provide the instantly claimed brightness enhancing film. One of ordinary skill in the art at the time of the invention would have been motivated by a reasonable expectation of success because the other components are equivalent and contain acrylate-functional groups for crosslinking.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.



Art Unit: 1711

Claims 1-10, 12, 13 and 19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/747985. Although the conflicting claims are not identical, they are not patentably distinct from each other for the following reasons. The claims of '985 recite a brightness enhancing film comprising the reaction product of the same components as set forth in the instant claims. Component (a) corresponds to applicant's (b), component (b) corresponds to applicant's (c), component (c) corresponds to applicant's component that is a non-halogenated (meth)acrylate monomer, and component (d) corresponds to applicant's component (d). The difference is that the claims of '985 do not set forth the instantly claimed brominated phenoxyethyl (meth)acrylate; however, the comprising language of the claims encompasses this specific monomer. It would have been obvious to one skilled in the art at the time of the invention to include a brominated phenoxyethyl (meth)acrylate in the compositions set forth in the claims of '985 since it is a species of phenoxyethyl(meth)acrylate monomer. One of ordinary skill in the art at the time of the invention would have been motivated by a reasonable expectation of successfully obtaining a reaction product useful as a brightness enhancing film. It would have been obvious to one skilled in the art at the time of the invention to employ any of the specific crosslinking agents set forth in the claims of '985 as the crosslinking agent set forth in the instant claims to provide the instantly claimed brightness enhancing film. One of ordinary skill in the art at the time of the invention would have been motivated by a reasonable expectation of success because the other components are equivalent and contain acrylate-functional groups for crosslinking.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 1711

*Conclusion*

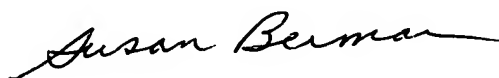
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Williams (5,855,983) is cited as art of interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan W. Berman whose telephone number is 571 272 1067. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 571 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SB  
8/21/2005



Susan W Berman  
Primary Examiner  
Art Unit 1711